

Cooperative Learning Strategy Lesson Plan

Subject: General Science

Level: First Form

Topic: Ecosystem

Subtopic: Food Chains

Duration: 50 minutes

Materials: Visual Aids, pictures, chips, tape, markers.

References:

- <http://www.abheritage.ca/abnature/Ecosystems/intro.htm>
- CXC Integrated Science, 2nd Edition, page 4-5

Previous Knowledge: The students are aware that all living things have certain characteristics.

Objectives: Provided with materials, students will be able to:

- a. Define the word “food chain” and identify the producer, consumer and decomposer.
- b. Assemble the pictures of organisms in a food chain.
- c. Appreciate the importance of food chains in an ecosystem.

Concepts:

1. The energy captured by plants is the only source of energy for all living organisms. Plants are the primary producers of food in an ecosystem.
2. Organisms that feed on others are called predators. Animals that feed on plants are predators called herbivores or primary consumers. Predators that feed on animals are called carnivores or secondary consumers.
3. Animals whose diet consist of both plants and animals are called omnivores. Parasites live on or inside another species the host on which they feed.
4. A sequence by which energy, in the form of food, passes from a plant to an animal and then to other animals is called a food chain.

Skills:

- Define food chain.
- Construct a food chain with given pictures
- Discuss the importance of an ecosystem.

Attitude: Appreciate the importance of food chain in an ecosystem and not to disrupt it.

Introduction:

Students will be placed in groups of four and seated around a table with a pencil and a piece of paper. Each member of a group will be asked to give a name of a plant or an animal.

Students will take turns recording their answers on the paper as it is passed around the table.

(RRRT) Each group will be asked to share how the organisms interact with each other.

Development:

- Students will be divided in groups of four. Each student will receive a picture that will be numbered. Based on the pictures, students will classify plants as producers and animals as consumers. Teacher will chose a number from each group and the students will be asked to come forward. With the cooperation of all the students the pictures will be connected to form a food chain. **(NH)** It will demonstrate to students how each one of them depends on each other to survive. Students whose pictures have been used to construct the food chain will be assigned a new picture.
- Each student in the group will be asked to place their pictures on the table and to brainstorm ways how to organize the pictures in order to construct a food chain with the pictures available on each table. Each student from each group will be given a chip. In order for students to share their taught, they must place their chip in the centre of the table. **(TC)** This technique assures that all students share their idea on how to construct their own food chain.
- Teacher will ask each group to share their food chain to the rest of the class and point out the producer, consumer and decomposer.

Closure: Summarize the concepts of:

- What is a food chain?
- The components of an food chain (producer , consumer and decomposer)
- Discuss the importance of food chain in a ecosystem

Conclusion: Provide a worksheet for students to identify the parts of a food chain.

Extended Activity:

- Students will be asked to construct their own food chain and to label each one of them as producer, consumer and decomposer.

Evaluation:

- *Strengths:*
- *Teacher:*
- *Students:*
- *Areas for Improvement:*
- *Teacher:*
- *Students:*
- *Follow up:*